
**2019 SECDEF ENVIRONMENTAL AWARD NOMINATION NARRATIVE,
ENVIRONMENTAL QUALITY – INDUSTRIAL INSTALLATION
MARINE CORPS SUPPORT FACILITY BLOUNT ISLAND, JACKSONVILLE,
FLORIDA**

INTRODUCTION

Mission. Marine Corps Support Facility Blount Island (MCSF-BI) plans, coordinates, and executes facility maintenance, construction, environmental management, safety, communications/network services, and physical security efforts in support of Blount Island Command’s (BICmd) logistics mission of managing and executing the Marine Corps Prepositioning Programs. As the primary tenant, BICmd provides prepositioning and operational logistics support to United States Marine Corps (USMC) and Department of Defense (DoD) forces to enable them to rapidly, and successfully, conduct and quickly recover from assigned missions across the full spectrum of expeditionary warfare.

Population. MCSF-BI has a population of approximately 120 Marines and Sailors, plus 180 DoD civilian employees, that oversee nearly 1000 contractor personnel at the installation. The installation houses several tenant organizations, including the Military Sealift Command and Naval Cargo Handling Battalion 11 (Naval Reserve), as well as the Aviation Ground Support Equipment, Marine Corps Maintenance Contractor, and Regional Base Operating Support (RBOS) contract organizations.



Typical Ship Loading Activities

Environmental Setting. MCSF-BI lies in the middle of the St. Johns River in Jacksonville, FL and covers 911.2 acres on the eastern half of Blount Island. An additional separate 325.8-acre dredge disposal area (DDA) is part of the MCSF-BI property and lies east of MCSF-BI, on the east bank of the St. Johns River. These two areas contain approximately 3 miles of coastline.

MCSF-BI is located on an island that was created by placing dredge material from the Dames Point-Fulton Cut shipping channel onto four smaller islands and adjacent marshes after World War II. Land use at MCSF-BI consists of developed industrial land, undeveloped land, open water, and a dredge spoil area. Developed industrial land occupies 686 acres. The remaining 225.2 acres of the installation and 325.8 acres of the dredge disposal area (DDA) are undeveloped.



Aerial View of Main base & DDA on East Side of St. Johns River

BACKGROUND

MCSF-BI is committed to environmental excellence and will continue to protect the local and global ecosystems, reduce the use of non-renewable natural resources, and support responsible and sustainable development through the operation of an environmental management program. Strict and common sense adherence to our environmental policies will create long-term environmental benefits and preserve natural resources necessary to support the future operation of the installation. Between 2017 through 2018, the installation’s environmental quality program had a number of significant accomplishments. These included MCSF-BI undergoing an intense two week ISO 14001 Audit and subsequently being certified as a 14001:2015 compliant facility

in March 2018. The certification was for the entire facility, including tenants and contractors, not just the command. The ISO 14001 standard is the basis for MCSF-BI's environmental management system. The facility maintains a Title V air permit program, NPDES program, and a general stormwater program.

The base maintains close ties to the local community through a stewardship program with the local school district. The base participates in the local emergency preparedness organizations and is a member of Jacksonville Spillage Control, Inc., a group of industrial facilities that pool their resources in the event of a major release into the environment.

During the award period, the Environmental office was comprised of two staff members with primary responsibility for waste management, environmental planning, and compliance with environmental laws and regulations (Clean Air Act, Clean Water Act, Resource Conservation and Recovery Act, Safe Drinking Water Act, etc.). Additional support was supplied by private contractors.

These impressive accomplishments took place in concert with military mission activities at MCSF-BI. All the activities worked in coordination with dynamic environmental quality efforts, aimed at protecting the flora and fauna of MCSF-BI and the surrounding area, while still accomplishing the critical mission assigned to the installation. Below are a few examples of the success enjoyed by MCSF-BI and accomplished through the efforts of every employee aboard the installation.

SUMMARY OF ACCOMPLISHMENTS

MCSF-BI's approach to its environmental management system reflects the principles consistent with DoD and Marine Corps policy. The natural resource management approach on MCSF-BI is to develop, promote, and refine a comprehensive, ecosystem-based management program for resource conservation that provides maximum support of the military mission and infrastructure, while achieving sustainability of species and habitat diversity and compliance with all applicable laws and regulations.

ISO 14001:2015. MCSF-BI received its Certification for ISO 14001:2015 on March 14, 2018. This certifies that the environmental management system is in compliance, as applicable to planning, coordinating, executing the environmental management efforts in support of the Blount Island Command's logistics mission. This certification was the culmination of over a year of transitioning the facility from the ISO 14001:2004 standard to the ISO 14001:2015 standard. The environmental section, in conjunction with our base partners, updated the entire EMS manual and procedures to accomplish this objective. The update also included reviewing and updating seventy-eight (78) environmental work instructions and one hundred-eleven (111) forms.

A third party audit of the new system was completed in August 2018. There were zero (0) major and zero (0) minor nonconformance(s) noted during this audit. The audit noted, under management strengths, that the "Hazardous Material Management System (HMMS) is a robust tracking/management system that seems to be well understood by employees working with and impacted by environmental issues." The auditor went further to state that two of our contractor tenants Hazmat tracking and accountability was determined to be best in class that they had encountered during their audits. The capability of the Environmental Management System to meet applicable



"Best in Class" Hazmat Tracking

requirements, expected outcomes, and the effectiveness of the management system in achieving company's objectives and overall effectiveness was determined by the auditors. The Management System's capability and effectiveness was judged to have an effectiveness level of Z. This is the highest rating that is obtainable under the ISO 14001:2015 standard. The rating of Z indicates that the system exceeds all requirements for documentation and implementation. MCSF-BI also conducts two (2) internal ISO 14001 audits, annually, to maintain the high results that were achieved during the external audits.

To control and minimize risk, MCSF-BI Environmental Section staff conducts annual environmental training to civilians and contractors. The installation has trained over 750 personnel in Resource Conservation and Recovery Act (RCRA), Stormwater Pollution Prevention Plan (SWPPP), Spill Prevention Control and Countermeasure (SPCC) and Hazardous Waste Operations and Emergency Response (HAZWOPER). The environmental training ensures compliance with regulations and policies.

MCSF-BI Environmental Office created a newsletter to inform all base personnel of upcoming and completed events. The newsletter is distributed to all base personnel via the base email system. The first newsletter was distributed in May 2018 and five (5) more times since. The newsletter is a way to educate readers on current environmental impacts, services, procedures, and future projects. The information provided in the newsletter has created an ongoing connection between the environmental staff and base personnel. Creating this line of communication among base personnel helps promote compliance and connects environmental issues to the mission.

Environmental Compliance. Marine Corps Support Facility Blount Island underwent a Headquarters Marine Corps Environmental Compliance Evaluation from 12 June through 16 June 2017. This inspection was conducted by a five person team of experts from Headquarters Marine Corps. These inspections are conducted on all facilities every three years and assess environmental compliance against U.S. Federal Environmental Regulations, Florida Environmental Regulations, and USMC-specific supplements (MCO P5090.2A), as well as the installation's plans and procedures. The intent of this inspection is to enable MCSF Blount Island to provide the Marine warfighter with the best combat ready equipment and supplies in the world, by supporting the mission identifying risks to health and safety of individuals and the environment. During this comprehensive inspection, only five (5) discrepancies were found. This was a reduction from 20 discrepancies found during the last inspection. Only two (2) of the discrepancies identified were ones that would result in non-compliance with Federal, State, or local law, regulation, or permit, if not corrected. This outstanding result was unprecedented for an industrial facility the size of Blount Island.

MCSF-BI maintains a Title V air permit program. The facility undertook the task of completing the permit renewal process in late 2016 and early 2017. The application process included a complete survey of the base operations to capture all processes that either needed to be included in the permit or could be exempted from the permit. It was determined that the facility included seven (7) distinct emission units some comprised of multiple pieces of equipment. Calculations of potential emissions were completed for all covered processes and included in the application. The application process took place concurrent with base operations allowing the



Satellite Accumulation Area Inspected by FDEP.

base to complete its mission without disruption. The permit application was submitted 13 October 2016 and the final permit was issued 30 January 2017. Florida Department of Environmental Protection (FDEP) personnel conducted a compliance inspection of the facility on 12 July 2018. No discrepancies were found during the inspection based on the facilities records and equipment inspections. The facility was determined to be in compliance with all of the applicable air rules and regulations.

MCSF-BI industrial mission identifies it as a large quantity generator of hazardous waste per the USEPA and FDEP rules and regulations. As part of the program the facility received an unannounced hazardous waste compliance inspection by FDEP personnel on 17 and 18 May 2017. Thirteen (13) separate buildings and all of the current year's waste manifests were inspected and reviewed during this inspection. Also reviewed was the base contingency plan and training records. No violations were noted on the records reviewed. Only one (1) minor discrepancy was found during this two (2) day inspection. A shop vacuum that was used to clean up waste paint dust was not closed at the end of the hose. The hose cap was replaced during the inspection and no further action was required.

The facility's registered aboveground storage tanks underwent an inspection on 22 August 2018 by the FDEP. The facility was determined to be in compliance with the Department's storage tank rules and regulations and no violations were noted.

Marine Corps Support Facility Blount Island underwent an inspection by the Commanding General, MCIEAST team from 19 through 21 June 2018. The inspection found MCSF-BI programs to be in compliance with the MCO P5090.2A. Noteworthy results were achieved and the command was found to be 100% mission ready.

Community Partnerships. MCSF-BI has many community partners, and continually seeks opportunities to partner with local and regional environment and conservation advocacy groups, such as the Audubon Society. Results of all resource surveys are reported annually to the Florida Natural Areas Inventory (FNAI) and are included in the state Conservation Lands Database. The FNAI maintains a comprehensive database of the biological resources of Florida, and is the primary source for information on Florida's conservation lands.

MCSF-BI has formed a partnership with The Rattlesnake Conservancy (TRC) for relocating nuisance snakes from the facility to the Florida National Guard's Camp Blanding Joint Training Center. MCSF-BI Environmental Section is responsible for the Pest Management Programs on the base. The Environmental Section provided an 8-hour venomous snake handling certification class on 23 August 2017. This class taught facility workers that respond to snake pest calls how to safely capture and handle snakes. MCSF-BI Environmental Section calls TRC when a snake has been captured and they take possession of the snake, place a tracking implant on them, and release throughout the forested area of Camp Blanding Joint Training Center. This process helps control the snake population on the island creating a safer working environment for Blount Island personnel while supporting area conservation efforts.

Although MCSF-BI is classified as a "closed" base with limited public access, on certain occasions, it welcomes local Boy Scout troops and students on the installation to participate in a variety of activities. The Boy Scouts constructed carpenter bee boxes and scattered native wildflower seeds in 2017. Boy Scouts also participated in the annual shoreline cleanups in 2017 and 2018. The groups filled 20-cubic-yard containers with wood, glass, plastic, and trash that had washed up on MCSF-BI's shoreline. This cooperative program improves aesthetics for both base personnel and the community at large, including boaters and homeowners along the St. Johns River. Another benefit for base personnel and the community is the promotion of

environmental stewardship and awareness of where trash and debris are deposited in the natural environment. Finally, removal of debris and potential contaminants from the shoreline improves the quality of the salt marsh ecological community.

On 28 November 2017, students from Mayport Coastal Sciences Middle School visited MCSF-BI for a science, technology, engineering and math (STEM) field trip with a focus on the installation's Environmental and Natural Resources Program. The program also included presentations from CH2M and MCSF-BI engineers and biologists and a tour of the facility and hands-on water quality testing experiments. The students tested a water sample from the St. Johns River and compared it with water quality results from a sample from a storm water pond at the facility. During the facility tour, the students visited the bird rookery and they learned about other animals that call Blount Island home, such as alligators, coyotes, manatees, rattlesnakes, and frogs.



STEM attendees working on water samples.

The installation has also implemented a Utility Energy Savings Contract (UESC) with TECO/Peoples Gas. These projects utilized the engineering support of the Utility to support projects that will be beneficial to both parties in the future.

Reduction in Hazardous Material Stored and Disposed. MCSF-BI established several objective targets as part of its EMS. One particular objective was to reduce the amount of hazardous materials stored onsite and to reduce the amount of off-spec (unused hazardous materials) disposed. In CY2017, a total of 29,416 hazardous materials containers were stored onsite, which is a 26 percent reduction compared to CY2016. In CY2017, a total of 27,768 usable hazardous material containers were donated to other DoD and local organizations, including Naval Station Mayport, Naval Cargo Handling Battalion 11, Fire Academy of the South, Safe Harbor Boys Home, Boy Scouts, local churches, Fleet Reserve Association, Duval County Emergency Management, and the City of Jacksonville Fire and Rescue. This is a 46 percent increase in hazardous materials donations compared to CY2016. The reduction in hazardous materials stored onsite and the increase in off-spec hazardous materials donations, both contributed considerable financial savings to MCSF-BI, by limiting the amount of hazardous materials purchased and the amount of waste sent offsite for disposal. In CY2016, 26,544 pounds of off-spec material was disposed of as hazardous waste, while in CY2017, 23,901 pounds of off-spec material was disposed of as hazardous waste. This is a 10% reduction in off-spec material disposed of as hazardous waste. The base has a very successful recycling program and in 2017 and 2018 the base qualified recycling program (QRP) was able to donate \$30,000 annually to the base MWR fund. The funds were used to directly benefit the uniformed service members that are the base's major tenant command.

Another high impact target was to reduce aerosol paint operations (documented in the Air Emissions Inventory) by 2 percent, from a CY2016 baseline. In CY2017, MCSF-BI used 9,637 pounds of aerosol paint compared to 33,734 pounds in CY2016. This reduction was achieved by using brush or roller application for paint in applications that would allow it and only allowing very small touch up jobs to be completed outside of the painting facility. This allowed for a more complete use, with less waste, and encouraged the use of spray equipment instead of aerosols.

Battery disposal was ranked as a significant aspect and impact. In CY2016, MCSF-BI disposed of 41,328 pounds of lithium ion batteries at a cost of \$193,001.76, while in CY2017, 14,328

pounds of lithium ion batteries were disposed of at a cost of \$66,911.76. The command obtained a waiver during this time period that allowed the command to dispose of the batteries through a local contractor, rather than DLA. The waiver was used once in 2018 and resulted in a savings of \$37,078.79 for the disposal of 17,087 lithium ion batteries. The waiver will continue to be used in the future when large quantities of expired batteries are off loaded from prepositioning ships.

Water Usage. MCSF-BI has implemented a water conservation project in Building 454. Building 454 has two Detroit Diesel engine driven fire protection water pumps that were being tested on a weekly basis. The system was using an adjustable flow restrictor to reduce the cooling water supply, thus, minimizing the amount of water consumed during the testing and discharged to the sanitary sewer after passing through an oil/water separator. This was completed in April 2017 and is projected to save 400,000 gallons of water per year.

Excess or Surplus Electronic Products Disposed of in an Environmentally Sound Manner.

MCSF-BI Installation Management Office, Environmental Section, implements a QRP program. MCSF-BI, tenant, and contract personnel operating at the installation participate in the QRP and follow recycling procedures and guidelines. MCSF-BI recycles its e-wastes such as televisions, computer monitors, computer terminals, CPUs, keyboards, printers, scanners, stereo equipment, radios, VCRs, DVDs, camcorders, desk and mobile phones, pagers, power tools, small kitchen appliances (microwaves and toaster ovens), hair dryers, curling irons, and electric razors. These items are taken to Building 452, and placed into a tri-wall. The material is picked up and



E-Waste Day Activities at MCSF-BI

transported offsite for recycling. E-wastes are also collected during Earth Day. For Earth Day, installation personnel can bring e-wastes from home for collection by the Environmental Section. When changes are made to the solid waste management program or to recycling procedures, training presentations are revised and distributed or delivered appropriately. The Environmental Manager also provided a recycling guide communication tool, which was distributed to all personnel, that provided instruction on where and how to manage e-waste. During the April 2017 and 2018 Earth Day activities, MCSF-BI collected six tri-walls of e-waste items totaling more than 4000 pounds.